

**Product Name:** ZX210 HDMI Splitter

**Product Description:** HDMI Type A, C, D Splitter Plug Socket enabling any Plug/Socket to Any Plug/Socket. 50 Ω impedance matching multi-layer board tailored for 8GHz signal jitter and electrical test measurements.  
HDMI **Type A, C, D** Plugs and Sockets. With Headers facilitating debugging EDID for emulation / monitoring purposes.

**Application:** Compatibility test, EDID debugging and bringup, System debugging

**Mates with :** Any HDMI Plug / Socket to Any HDMI Plug / Socket ( types A, C, and D)  
Standard header 0.1" center onboard

**Test reports:** Using 6" long HDMI cable, following functional tests are completed:

**Test procedure:** none

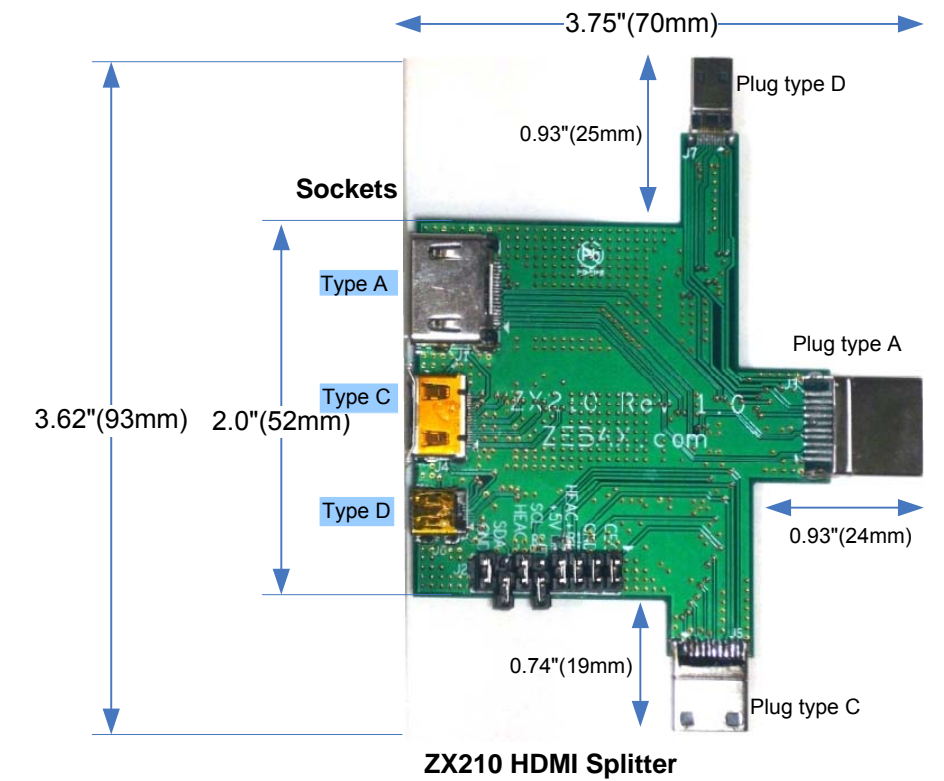
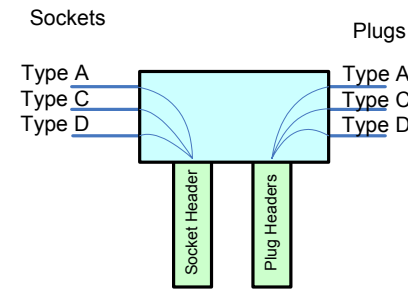
**Pinouts:** Following tables list HDMI connector pinout description along with the header pin assignment.

**Debugging procedure:** Using provided headers and scope/logic analyzer capture and debug the I2C interface transaction as well as controlling the HOTPLUG functionality. Testing can be done using external device to induce EDID payload for purpose of system testing, debugging

Table 1

Test report			
Display Resolution	Plug	Socket	Status
1080p	A	A	PASS
1080p	A	C	PASS
1080p	A	D	PASS
1080p	C	A	PASS
1080p	C	C	PASS
1080p	C	D	PASS
1080p	D	A	PASS
1080p	D	C	PASS
1080p	D	A	PASS

Simplified block diagram



**Operating procedure:** ZX210 Splitter is designed for engineering application where EDID debugging can easily be accomplished. Provided are Socket and Plug headers. The Socket headers have common Socket connectors' signal listed in table 5. The Plug headers have common Plug connectors' signals listed in table 5.

For normal operation (ByPass) , All headers need to be installed, connecting Socket to Plug signals as listed on table 5.

Note: All CLK and Data lanes have direct connection between all Plug and Sockets. User breakout adapter ZX200, ZX203, or ZX205 for electrical tests.

Table 2

Type A	
Pin	Function
1	TXD2P
2	GND
3	TXD2N
4	TXD1P
5	GND
6	TXD1N
7	TXD0P
8	GND
9	TXD0N
10	TXCP
11	GND
12	TXCN
13	CEC
14	RSV
15	DDC_SCL
16	DDC_SDA
17	GND
18	+5V
19	HOTPLUG

Table 3

Type C (mini)	
Pin	Function
1	GND
2	TXD2P
3	TXD2N
4	GND
5	TXD1P
6	TXD1N
7	GND
8	TXD0P
9	TXD0N
10	GND
11	TXCP
12	TXCN
13	GND
14	CEC
15	DDC_SCL
16	DDC_SDA
17	RSV
18	+5V
19	HOTPLUG

Table 4

Type D(micro)	
Pin	Function
1	HOTPLUG/ HEAC-
2	RSV / HEAC+
3	TXD2P
4	GND
5	TXD2N
6	TXD1P
7	GND
8	TXD1N
9	TXD0P
10	GND
11	TXD0N
12	TXCP
13	GND
14	TXCN
15	CEC
16	GND
17	DDC_SCL
18	DDC_SDA
19	+5V

Table 5

Header		
Socket	Plug	Function
1	1	CEC
2	2	GND
3	3	RSV
4	4	+5VDC
5	5	DDC_SCL
6	6	HOTPLUG
7	7	DDC_SDA
8	8	GND

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SPECIFIED DIMENSIONS ARE INCHES (MM). ROHS COMPLIANT		ASSEMBLY DRAWING ITEM: ZX210
DESCRIPTION: HDMI Type A, C, D Splitter		
CHECKED: M. MARINA	DRAWN: SLAVIK	REVISION: 1.0 SHEET: 1 OF 1